



**OPTION PRICING MODEL WITH STOCHASTIC
EXERCISE PRICE**

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Abstract

This paper discusses the problem of pricing on some multi-asset option European exchange option in jump-diffusion model by martingale method. Supposing that risk assets pay continuous dividend regarded as the function of time. By changing basic assumption of William Margrabe exchange option pricing model to the assumption that jump process is count process that more general than Poisson process. It is established that the behavior model of the stock pricing process is jump-diffusion process. With risk-neutral martingale measure, pricing formula and put-call parity of European exchange options with continuous dividends are obtained by stochastic analysis method. The results of Margrabe are generalized.

Keywords and phrases: dividend, European exchange options, jump-diffusion, dividends, count process.

**Pioneer Journal
of Advances in
Applied
Mathematics**



Pioneer Scientific
Publisher